Remarks

This Application has been carefully reviewed in light of the Office Action mailed July 6, 2004. Applicant appreciates the Examiner's consideration of the Application. Applicant has made clarifying amendments to Claims 1-3, 5-6, 8, 15, and 22-25. None of these amendments are considered narrowing or necessary for patentability. Applicant also respectfully provides these remarks. Applicant respectfully requests reconsideration and allowance of all the pending claims.

I. Claim Objections

The Examiner objects to Claim 22 because the claim recites a series of steps under a "means for" heading. Although Applicant does not necessarily agree that "[t]he proper format for invoking 112, 6th paragraph is to recite the phrase 'means for' for each particular limitation," as stated by the Examiner, to advance prosecution Applicant has amended Claim 22 such that each limitation recites "means for." This amendment should not be interpreted as limiting Claim 22 in such a way that a different means is necessarily required for the performance of each of the one or more functions recited in each limitation or that a different means is necessarily required for each element of the claim.

The Examiner objects to Claims 23-25, stating that there is insufficient antecedent basis for the recitation of "the specified number of merged search results" in the second element of each of these claims. Applicant has amended Claims 23-25 to recited "a specified number of merged search results" in the second element of each of these claims.

For at least these reasons, Applicant respectfully requests the Examiner to withdraw the objections to Claims 22 and 23-25.

II. The Claims Recite Patentable Subject Matter

The Examiner rejects Claims 1-14 and 22-24 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicant respectfully disagrees.

The patent laws define patentable subject matter as "any new and useful process, machine, manufacture or composition of matter, or any new and useful improvement thereto." *See* 35 U.S.C. § 101. When an abstract idea is reduced to a practical application, the abstract

idea no longer stands alone if the practical application of the abstract idea produces a useful, concrete, and tangible result. This then satisfies the requirements of 35 U.S.C. § 101. *See In re Alappat*, 33 F.3d 1526, 1544, 31 U.S.P.Q.2d 1545, 1557 (Fed. Cir. 1994); see also *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, i49 F.3d 1368, 1373, 47 U.S.P.Q.2d 1596, 1601-02 (Fed. Cir. 1998). While an abstract idea by itself may not satisfy the requirements of 35 U.S.C. § 101, an abstract idea when practically applied to produce a useful, concrete, and tangible result satisfies 35 U.S.C. § 101. *See AT&T Corp. v. Excel Comm. Inc.*, 172 F.3d 1352, 1357, 50 U.S.P.Q. 1447, 1452 (Fed. Cir. 1999) (stating that as technology progressed, the CCPA overturned some of the earlier limiting principles regarding 35 U.S.C. § 101 and announced more expansive principles formulated with computer technology in mind); *see also In re Musgrave*, 431 F.2d 882, 167 U.S.P.Q. 280 (CCPA 1970) (cited by the Federal Circuit in *AT&T Corp.*, 172 F.3d at 1356). Thus, producing a useful, concrete, and tangible result is the key to patentability according to *State Street* and other applicable case law.

"Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101." M.P.E.P. § 2106. Indeed, a method or process remains statutory even if some or all of the steps therein can be performed in the human mind, with the aid of the human mind, or because it may be necessary for one performing the method or process to think. *See In re Musgrave*, 431 F.2d at 893, 167 U.S.P.Q. at 289. As stated by the Federal Circuit in *State Street* and as explicitly confirmed in the M.P.E.P., "[T]ransformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces 'a useful, concrete, and tangible result' -- a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades." *State Street*, 149 F.3d at 1373, 47 U.S.P.Q.2d at 1601-02; M.P.E.P. § 2106. As discussed below, Applicant's claims clearly recite a useful, concrete, and tangible result and are therefore directed to patentable subject matter.

As an example, prior to the amendments presented in the current Response, independent Claim 1 was directed to an *"electronic commerce system comprising a server operating on one or more computers and operable to"* perform the limitations recited in the body of the claim.

Prior to the amendments presented in the current Response, the electronic commerce system was recited as being operable to:

- *communicate* a search query for one or more products *to one or more seller databases* that contain product data, *each seller database operable to generate* local search results responsive to the search query;
- *communicate* one or more sorting parameters *to the seller databases*, the sorting parameters *directing each seller database to sort* the local search results *generated at each seller database in response to the search query*;
- *receive* sorted local search results *from one or more of the seller databases*;
- *merge the sorted* local search results *received from the seller databases to generate* merged search results;
- *sort the* merged search results according to the sorting parameters; and
- *communicate* the sorted merged search results to a user.

Thus, even prior to the amendments presented in the current Response, communicating sorted merged search results to a user was one practical application of independent Claim 1, the useful, concrete, and tangible result being the sorted merged search results communicated to the user. Moreover, Claim 1 clearly recited that the electronic commerce system (which comprised a server operating on one or more computers) was operable to perform the limitations recited in the body of the claim.

For substantially similar reasons, independent Claims 22 and 23 recited at least one practical application and a useful, concrete, and tangible result even prior to the amendments presented in the current Response.

As another example, even prior to the amendments presented in the current Response, independent Claim 8 was directed to a "method for processing search results in an electronic commerce system." Prior to the amendments presented in the current Response, the method comprised:

- *communicating a search query* for one or more products *to one or more seller databases* that contain product data, *each seller database operable to generate* local search results responsive to the search query;
- *communicating one or more sorting parameters to the seller databases*, the sorting parameters *directing each seller database to sort* the local search results *generated at each seller database* in response to the search query;
- *receiving* sorted local search results *from one or more of the seller databases*;
- *merging* the sorted local search results *received from the seller databases to generate* merged search results;
- *sorting* the merged search results according to the sorting parameters; and

- *communicating* the sorted merged search results *to a user*.

Thus, even prior to the amendments presented in the current Response, communicating sorted merged search results to a user was one practical application of independent Claim 8, the useful, concrete, and tangible result being the sorted merged search results communicated to the user. Moreover, Claim 8 clearly recited steps that would be performed by one or more computer systems.

For substantially similar reasons, independent Claim 24 recited at least one practical application and a useful, concrete, and tangible result even prior to the amendments presented in the current Response.

Additionally, the Examiner cites *Ex parte Bowman*, 61 U.S.P.Q.2d 1669 (Bd. Pat. App. & Inter. 2001) in support of the proposition that the "claimed invention must utilize technology in a non-trivial manner." (Office Action, Page 7) Applicant does not see the relevance of this particular decision. The patent application under appeal in *Bowman* was held unpatentable as being directed to non-statutory subject matter because the disclosed and claimed invention was directed to nothing more than a human making mental computations and manually plotting the results on a paper chart. *See Bowman*, 61 U.S.P.Q.2d at 1671. The claims of the patent application in *Bowman* included no reference to a computer system or any computer-related function. Indeed the specification of the patent application did not even recite the use of a computer system. *See Id*. These facts were apparently important to the Board, which stated, "Appellant has carefully avoided tying the disclosed and claimed invention to any technological art or environment." *Id*. The Board found that the invention was "nothing more than an abstract idea which is not tied to any technological art, environment, or machine, and is not a useful art as contemplated by the Constitution of the United States. The physical aspects of claim 1, which are disclosed as nothing more than a human manually drawing a chart and plotting points on this chart, do not automatically bring the claimed invention within the technological arts." *Id*.

In contrast to the patent application that was the subject of review in *Bowman*, Applicant's independent Claims 1, 8, and 22-24 specifically recite "an electronic commerce system" and "one or more seller databases," and independent Claims 1 and 23 specifically recited, prior to the amendments presented in this Response, that the electronic commerce system

comprises a server operating on one or more computers. Additionally, Applicant notes that the Specification is replete with descriptions of the use of computer systems to perform various steps and functionality recited in Applicant's claims. Thus, the facts in *Bowman* are in no way analogous to the facts in the present case.

Furthermore, the Examiner states, "Indeed the steps of [Claims 1-14 and 22-24] can be performed by hand and do not require any technology whatsoever. Although the claims do recite the term 'database,' the use of this term does not constitute a technological recitation since the database could [be] a physical database (e.g., a folder in a cabinet)." (Office Action, Page 3) Applicant respectfully disagrees with the Examiner's position. First, with respect to Claim 1 for example, the claims, prior to the amendments presented in this Response, were clearly directed to an "electronic commerce system comprising a server operating on one or more computers and operable to" perform the limitations recited in the claim. Moreover, the databases could not be a folder in a cabinet because a search query and one or more sorting parameters could not be communicated to a folder in a cabinet, nor could a folder in a cabinet "generate local search results" or "sort the local search results," as recited in Claim 1 for example.

In any event, although Applicant believes Claims 1-14 and 22-24 are directed to patentable subject matter without amendment for the reasons set forth above, Applicant has amended independent Claims 1 and 22-23 to further clarify that these claims each recite a computer-implemented system comprising one or more computer systems and are directed to patentable subject matter, and has amended independent Claims 8 and 24 to further clarify that these claims recite computer-implemented methods performed using one or more computer systems and are directed to patentable subject matter. None of these amendments are considered narrowing or necessary for patentability. For at least these reasons, Applicant respectfully requests reconsideration and allowance of Claims 1-14 and 22-24.

For at least these reasons, Applicant respectfully requests that Examiner to withdraw the rejections of Claims 1-14 and 22-24 under 35 U.S.C. § 101.

III. Claims 1-25 Comply with 35 U.S.C. § 112, Second Paragraph

The Examiner rejects Claims 1-25 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully disagrees.

With respect to Claims 1-7 and 23, the Examiner states, "Claims 1-7 and 23 are system claims. However, these claims recite a process for a method and not structural elements of a system. Therefore it is unclear to the examiner how the process limitations of these claims affect the structural elements of the system. System claims should be directed to the structural elements of a system and not to the process of a method." (Office Action, Page 3) Applicant respectfully disagrees with the Examiner's position. Applicant discusses independent Claim 1 as an example. In discussing independent Claim 1, Applicant discusses the language of Claim 1 as amended in the current Response. However, Applicant notes that the amendments were not made for purposes of the rejections under 35 U.S.C. § 112, second paragraph.

Independent Claim 1 recites, "A computer-implemented electronic commerce system comprising one or more computer systems each comprising one or more processing units and one or more memory units, the one or more computer systems operable to" perform certain limitations recited in the body of the claim. The system recited in Claim 1 (and its dependent claims) clearly comprises one or more computer systems. The M.P.E.P. states, "Any terminology in the preamble that limits the structure of the claimed invention must be treated as a claim limitation." M.P.E.P. § 2111.02 citing *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257, 9 U.S.P.Q.2d 1962, 1966 (Fed. Cir. 1989) Thus, Applicant respectfully submits that it would be improper to state that "these claims recite a process for a method and not structural elements of a system."

Additionally, the Examiner states, "Claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function." (Office Action, Page 2; citations omitted) Applicant respectfully submits that the rejections of Claims 1-7 and 23 under 35 U.S.C. § 112, second paragraph, is improper because the scope of the claims would be clear to one of ordinary skill in the art at the time of invention. More particularly, Applicant believes that the statements made by the Examiner with respect to the rejection of Claims 1-7 and 23 under 35 U.S.C. § 112, second paragraph, and the citation of M.P.E.P. § 2114 would be more

appropriately discussed in the art rejections and do not support a rejection under 35 U.S.C. § 112, second paragraph. Applicant notes that the essential inquiry pertaining to the definiteness requirement is whether the claims set out and circumscribe subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of: (a) the content of the particular application disclosure; (b) the teachings of the prior art; and (c) the claim interpretation that would be given by one possessing ordinary skill in the art at the time the invention was made. M.P.E.P. § 2173.02. Furthermore, the test for indefiniteness under 35 U.S.C. § 112, second paragraph, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." M.P.E.P. §2173.02 (citing *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986)). Applicant respectfully submits that the meaning of Claims 1-7 and 23 would certainly be clear to one of ordinary skill in the art at the time of invention such that these claims comply with 35 U.S.C. § 112, second paragraph.

Furthermore, taking the Examiner's apparent position to the extreme, any system claim that recites a memory and a processor, the memory storing certain information and the processor operable to perform certain functions, would be anticipated by any reference that discloses a memory and a processor because the structure of the claim would be disclosed by the reference (regardless of whether the operations are disclosed). This result simply cannot be the rule. System claims that involve computer systems and the operation of computer systems generally focus on the operations and functions performed by the computers in the system. Computers must be programmed to perform certain functions, using one or more of programmed software, firmware, or hardware. It simply is not the case that any reference that discloses a processor and memory anticipates a claims that includes a computer system.

The scope of Claims 1-7 and 23 is reasonably ascertainable by those skilled in the art and thus the claims are not indefinite. *See* M.P.E.P. § 2173.05(e) (citing *Ex parte Porter*, 25 U.S.P.Q.2d 1144, 1145 (Bd. Pat. App. & Inter. 1992)). Applicant respectfully requests the Examiner to withdraw the rejections of Claims 1-7 and 23 under 35 U.S.C. § 112, second paragraph.

With respect to independent Claims 1, 8, 15, and 22-25, the Examiner states that these claims "all recite the limitation '. . . one or more seller databases . . . .' If there were only one

seller database, then the step of merging the sorted search results would never happen because there is nothing to merge the search result with. For this reason, it is unclear to the Examiner what the scope of the claim is when there is only one seller database." (Office Action, Page 4) Although Applicant believes that the scope of Claims 1, 8, 15, and 22-25 would be understood by those skilled in the art when the claim is read in light of the specification, which is the test for definiteness, to advance prosecution of the present Application Applicant has made clarifying amendments to Claims 1, 8, 15, and 22-25. These amendments are not considered narrowing or necessary for patentability.

For at least these reasons, Applicant respectfully requests that the Examiner withdraw the rejections of Claims 1, 8, 15, and 22-25 under 35 U.S.C. § 112, second paragraph.

IV. The Claims are Allowable over the Rejection under 35 U.S.C. § 103

The Examiner rejects Claims 1-25 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2002/0147704 A1 to Borchers ("*Borchers*") in view of U.S. Patent 6,745,177 B2 to Kepler et al. ("*Kepler*") and further in view of U.S. Patent No. 6,006,218 to Breese et al. ("*Breese*"). Applicant respectfully disagrees.

A. *Borchers* Cannot be Relied Upon to Reject Claims 1-25

Assuming for the sake of argument that *Borchers* could be properly combined with *Kepler* and *Breese* as the Examiner suggests, Applicant respectfully submits that, as discussed below, patentable distinctions would still exist between Claims 1-25 and the proposed *Borchers-Kepler-Breese* combination. However, Applicant notes at the outset that Applicant could antedate *Borchers* based at least on Applicant's date of conception and reduction to practice prior to January 24, 2001 (the filing date of *Borchers*). While Applicant has chosen not to do so in the present Response due to the clear distinctions between Applicant's claims and the Examiner's proposed *Borchers-Kepler-Breese* combination discussed below, Applicant reserves the right to antedate *Borchers* in a future Response or on Appeal, if appropriate.

B. Applicant's Claims are Allowable over the Proposed *Borchers-Kepler-Breese* Combination

Even assuming *Borchers* does qualify as prior art, Applicant's claims would still be allowable over the Examiner's proposed *Borchers-Kepler-Breese* combination because

Borchers, whether considered alone, in combination with *Kepler* and *Breese*, or in combination with the knowledge generally available to one of ordinary skill in the art at the time of invention, fails to disclose, teach, or suggest various limitations recited in Applicant's claims. Applicant discusses independent Claim 1 as an example.

Borchers merely discloses a system and method for searching for data in disparate file systems and returning a merged list of search results. (Abstract; Page 1, Paragraph 0008) *Borchers* further discloses an search program comprising: (1) an interface for receiving a search request from a client; (2) a first module for issuing the search request to an operating system and receiving back a first list of search results; (3) a second module for issuing the search request to a disparate server system and for receiving back a second list of search results, the second list of search results being in a different format than the first list; and (4) a merge system for merging the first list and the second list into a merged list having a common format. (Page 1, Paragraph 0008)

However, *Borchers* fails to disclose, teach, or suggest at least the following limitations recited in Claim 1 (both before and after the amendments presented in the current Response):

- communicate one or more sorting parameters to the seller databases, the sorting parameters directing each seller database to sort the local search results generated at each seller database in response to the search query;
- receive sorted local search results from one or more of the seller databases; and
- merge the sorted local search results received from the seller databases to generate merged search results.

At the outset, Applicant notes that *Borchers* is not even directed to an electronic commerce system. In contrast, amended Claim 1 recites a "computer-implemented electronic commerce system comprising one or more computer systems each comprising one or more processing units and one or more memory units."

Moreover, *Borchers* discloses that its search program, which is located at a centralized location to the disparate file systems being searched and which is in communication with the client issuing the search request, includes a merge system for merging and sorting the results from the various searches. Thus, the search results as disclosed in *Borchers* are clearly sorted at

the centralized search location and, apparently, after the results are merged. In contrast, even prior to the amendments presented in this Response, Claim 1 recited that the server of its electronic commerce system was operable to "communicate one or more sorting parameters to the seller databases, the sorting parameters *directing each seller database to sort the local search results generated at each seller database* in response to the search query." Thus, even assuming for the sake of argument that the disparate file systems disclosed in *Borchers* could be equated with the one or more seller databases recited in Claim 1 (which Applicant does not concede), *Borchers* would still fail to disclose, teach, or suggest communicating "one or more sorting parameters" to the disparate file systems (which the Examiner equates with Applicant's one or more seller databases, *"the sorting parameters directing each"* disparate file system *"to sort the local search results generated at each"* disparate file system *"in response to the search query,"* a recited in Claim 1. Instead, *Borchers* clearly discloses that the search results generated at each of the disparate file system are received at the centralized search program, where they are then merged and sorted. Certain of the amendments presented in this Response make these distinctions even more clear.

The Examiner correctly acknowledges that *Borchers* does not teach communicating one or more sorting parameters to the seller databases, the sorting parameters directing each seller database to sort the search results generated at each database in response to the search query. (Office Action, Page 6) However, the Examiner asserts that *Kepler* teaches this limitation. Applicant respectfully disagrees.

Kepler merely discloses a search-routing database that is used to direct database search requests to only those databases that may contain results to the search request. (Abstract) Applicant notes that *Kepler*, like *Borchers*, is not even directed to an electronic commerce system. In contrast, amended Claim 1 recites a *"computer-implemented electronic commerce system comprising one or more computer systems each comprising one or more processing units and one or more memory units."*

Additionally, the portion of *Kepler* on which the Examiner relies as disclosing "communicat[ing] one or more sorting parameters to the seller databases, *the sorting parameters directing each seller database to sort the local search results generated at each seller database*

in response to the search query," as recited in Claim 1 prior to the amendments presented in the present Response, merely discloses:

> There are numerous ways to return the results of a database search. For example, certain responsive records could be merged together or sorted according to a predefined ordering criteria, such as alphabetical order. A merging scheme that produces a unitary output from multiple, multi-database records furthers the transparency of the system to the user, and allows for encapsulation of data, providing broad flexibility in data management. Of course, it will be appreciated that any suitable way of returning the search results may be used in accordance with the principles of this invention.

(Column 9, Lines 5-14)

While *Kepler* mentions merging and sorting, it is clear that *Kepler* is discussing techniques for returning search results to the user in order to "further the transparency of the system to the user." In other words, the search results received from the disparate databases are merged and sorted and then communicated to the user. This is no way discloses, teach, or suggests a server operable to "*communicate a search query . . . to one or more seller databases . . . each seller database operable to generate local search results responsive to the search query*," "*communicate one or more sorting parameters to the seller databases, the sorting parameters directing each seller database to sort the local search results generated at each seller database in response to the search query*," "*receive the sorted search local search results from one or more of the seller databases*," and "*merge the sorted local search results received from the seller databases* to generate merged sorted local search results*," as recited in Claim 1 prior to the amendments presented in the present Response. Certain of the amendments presented in this Response make these distinctions even more clear.

Furthermore, even assuming for the sake of argument that *Kepler* did disclose, teach, or suggest "communicat[ing] one or more sorting parameters to the seller databases, the sorting parameters directing each seller database to sort the local search results generated at each seller database in response to the search query," as recited in Claim 1 prior to the amendments presented in the present Response, Applicant respectfully submits that the Examiner has not shown the required teaching, suggestion, or motivation to combine such teaching with the system disclosed in *Borchers*. With regard to the proposed *Borchers-Kepler* combination, the Examiner states that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Kepler into the invention of Borchers. One of ordinary

skill in the art would have been motivated to do so in order to create a sorted list of records, as taught by Kepler." (Office Action, Page 6) Applicant respectfully submits that the Examiner's proposed motivation does not address the deficiencies of *Borchers*. Indeed, *Borchers* itself discloses sorting its merged list of search results at the centralized search program on the centralized computer system. Again, assuming for the sake of argument that *Kepler* does teach the limitation asserted by the Examiner (which it does not), the question is whether any of the cited references or the knowledge generally available to one having ordinary skill in the art at the time of invention provides a teaching, suggestion, or motivation for one of ordinary skill in the art to modify *Borchers* to "*communicate one or more sorting parameters to the seller databases, the sorting parameters directing each seller database to sort the local search results generated at each seller database in response to the search query*," as recited in Claim 1. Applicant respectfully submits that the Examiner has not shown such a suggestion, teaching, or motivation.

Breese fails to account for these deficiencies of *Borchers* and *Kepler*.

For at least these reasons, Applicant respectfully requests reconsideration and allowance of independent Claim 1 and its dependent claims. For substantially similar reasons, Applicant respectfully requests reconsideration and allowance of independent Claims 8, 15 and 22-25 and their dependent claims.

V.   No Waiver

All of Applicant's arguments and amendments are without prejudice or disclaimer. Additionally, Applicant has merely discussed example distinctions from the various references cited by the Examiner. Other distinctions may exist, and Applicant reserves the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicant does not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicant are sufficient to overcome the Examiner's rejections.

Conclusion

Applicant has made an earnest attempt to place this case in condition for allowance. For at least the foregoing reasons, Applicant respectfully requests full allowance of all pending claims.

If the Examiner believes a telephone conference would advance prosecution of this case in any way, the Examiner is invited to contact Christopher W. Kennerly, Attorney for Applicant, at the Examiner's convenience at (214) 953-6812.

Although Applicant believes no fees are due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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Date: October 6, 2004

Customer No.: **05073**